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CONLEY, SEAN EVERETT	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/766,723
Filing Date: January 22, 2001
Appellant(s): HOKE ET AL.

Scott S. Servilla
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 4, 2009 appealing from the Office action mailed December 10, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

U.S. Pat. 5,711,071	FROMSON	1-1998
DE 4007964A1	HAGER	9-1991
EP 634205A1	BEITZ et al.	1-1995

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 49-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fromson et al. (U.S. Patent No. 5,711,071) in view of Hager (DE 4007964A1 - English translation).

Fromson et al., teach the application of a catalytic coating to the surfaces of an air conditioning and ventilating system for a vehicle wherein the catalyst is applied to radiators and condensers, heat exchange surfaces, fan blades, grill means and other ventilating components in order to treat the air surrounding the vehicle to eliminate ozone therein and minimize any further contribution to the pollution of the surrounding atmosphere (see the abstract, column 1, and column 4, line 8 through column 5, line 50).

Hager teaches the provision of a catalytic coating on outdoor surfaces such as those of buildings to remove ozone from the surrounding atmosphere to prevent smog formation. CuO is recited as the preferred catalyst (see pages 2-3 of the English translation, especially page 2, paragraphs 4-5 and page 3, paragraph 1).

It would have been obvious to one of ordinary skill in the art to form a catalyst coating on the outdoor components of a building HVAC system, such as the condenser, as applied to the equivalent vehicular components as taught in Fromson et al., because it would act to remove ozone from the surrounding atmosphere and reduce smog formation by placement on building structures as taught in Hager.

With respect to claim 58, it is well recognized that the heat exchange surfaces in HVAC systems will reach temperatures above 25° C during normal operation.

Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fromson et al. in view of Hager as applied to claims 49-59 above, and further in view of Applicant's admission of the state of the art.

On page 2, lines 35-38 of Applicant's instant specification Applicant acknowledges the catalytic activity Of CuO, and on page 3, lines 10-16 Applicant also acknowledges the art recognition of the catalytic activity of manganese oxide.

Hager clearly teaches the use of copper oxides (see pages 2-3 of the English translation) and it would have been obvious to one of ordinary skill in the art to employ any recognized equivalent thereof, such as manganese oxide, which equivalence is acknowledged by Applicant's own admission of the state of the prior art.

Claims 49-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beitz et al. (EP 634205A - English translation).

Beitz et al. teach incorporating an ozone decomposing catalyst onto the equipment in air conditioning and ventilating equipment. It is active at normal ambient temperatures to decompose ozone in an air stream (see page 3, line 19 to page 4, line 15 of the English translation). Beitz et al. do not specifically recite that the catalyst is incorporated onto an outdoor component of the air conditioning or ventilation system, however, they clearly specify that it is functional at ambient or normal atmospheric

temperatures, and it is commonly recognized that our atmosphere contains a measurable degree of ozone. As such, it would have been obvious to one of ordinary skill in the art to include the catalyst of Beitz et al. on an outdoor component of an air conditioning or ventilating system, such as a condenser, because it would effectively combat the influx of ozone into an air conditioned residence.

With respect to claim 58, it is well recognized that the heat exchange surfaces in HVAC systems will reach temperatures above 25° C during normal operation.

Claims 49-60 are rejected under the judicially created doctrine of obviousness- type double patenting as being unpatentable over claims 2 and 22-25 of U.S. Patent No. 5,620,672.

Although the conflicting claims are not identical, they are not patentably distinct from each other because they are of the same inventive concept with '672 reciting a specific ozone treating catalyst for the apparatus claimed in the instant claims, the ozone decomposing capability of the recited catalyst being well recognized in the art and therefor obvious in it's application. '672 further claims application of the catalyst to components such a fan blades, which are well recognized as part of an outdoor component of an air handling system.

(10) Response to Arguments

The Examiner would first note that the term "immovable", found in Appellant's independent claims 49 and 51, is a relative term that in the broadest sense can be

associated with almost any structure. Appellant's own specification at page 5, lines 25-35 defines non-moving as anything considered stationary such as fan blades or louvers, even though the blades revolve and the louvers can be moved.

Argument I

Claims 49-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fromson et al. (U.S. Patent No. 5,711,071) in view of Hager (DE 4007964A1 - English translation).

Appellant argues that the combination of Fromson and Hager is supported only by an obvious to try rationale because Appellant asserts that the equivalency of the references is not recognized. The Examiner would disagree and point out that both references teach vehicular embodiments and both are addressing ozone abatement with Hager clearly teaching the associated benefit of preventing smog formation which is clear and proper motivation to one of ordinary skill in the art with every expectation of success.

In response to Appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

As to claims 51 and 52, Appellant further argues that the cited references fail to teach the use of a separate substrate for the catalyst, however, the Examiner would disagree and point out that Fromson explicitly teaches the provision of the catalyst on a separate substrate specifically so that the catalyst can be removed and cleaned or replaced. See column 4, line 67 through column 5, line 50, with lines 42-45 of column specifically noting the removal and cleaning.

As to claims 53 and 54, Appellant argues that the requirements of actively moving ambient air into contact with the catalyst and the provision of an air handling system are not met, however, the Examiner would again point out that Fromson teaches the, provision of a fan to move air into contact with the catalyst and would also assert that the vehicular HVAC system of Fromson is an air handling system.

As to claims 55 and 56, Appellant also argues that the references fail to teach the provision of the catalyst on surfaces such as fans, fan blades, filters, screens and grills, however, the Examiner would again disagree noting that Fromson clearly teaches such structure and would again point to column 5, lines 1-50.

Argument II

Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fromson et al. in view of Hager as applied to claims 49-59 above, and further in view of Applicant's admission of the state of the art.

Appellant argues that the Office Action fails to state why it would have been obvious to dispose a manganese oxide catalyst on the structures of an air handling system.

The Examiner disagrees. The Appellant has acknowledged the art recognition of the catalytic activity of manganese oxide (see page 2, lines 35-38 of Appellants spec). Therefore, since Hager clearly teaches the use of copper oxides for their catalytic activity (see pages 2-3 of the English translation), it would have been obvious to one of ordinary skill in the art to substitute one catalyst for the other to yield the predictable result of removing ozone.

Argument III

Claims 49-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beitz et al. (EP 634205A - English translation).

In response to Appellant's argument that a key aspect of the claimed invention is treatment of the atmosphere in general, not treating an air stream drawn or forced out of confined space, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Appellant further argues that the modification of Beitz to place the catalyst on an outdoor component of the HVAC system for the purpose of combating the influx of ozone into and air-conditioned structure is improper because Appellant alleges that such placement would

not effect the air drawn into the residence. The Examiner would disagree and assert that abatement of ozone in the atmosphere surrounding a structure would intrinsically prevent or minimize the influx of ozone into the structure. The Examiner did not assert that the influx was a function of the outdoor component delivering that air into the structure. That would be accomplished by normal access of the residence interior such as the opening of doors and structural leakage. The modification of Beitz does not destroy the intended use of the system, but enhances by adding protection to the general atmosphere as well as that of the interior of the structure.

Appellant further argues that the catalysts of Beitz are directed to use at ambient temperatures while those of the invention work with high bulk air flow and/or elevated temperatures, and the Examiner would first point out that the Appellant's claims are all drawn to apparatus without structural limitations to the degree of airflow and the requiring only the capability of activity above 25 °C (or 77 °F). The Examiner would maintain that this argument is not persuasive because Beitz teaches that heat is not required for effective .catalytic activity, but does not exclude the activity under heated conditions. Beitz also teaches the use of the catalyst in HVAC systems which intrinsically have heated conditions and the use of the catalyst in air streams (see the abstract).

Finally, Appellant argues that one of ordinary skill in the art would not be motivated to "move" the catalysts associated with an automobile air conditioner to an outdoor, component of an air conditioning system, but the Examiner would assert that such a system of an automobile is an "outdoor component".

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Sean E Conley/
Primary Examiner, Art Unit 1797

Conferees:

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1797

/Glenn A Caldarola/
Acting SPE of Art Unit 1797